

## ABSTRACT OF THE DISCLOSURE

Disclosed herein is a method for economically manufacturing high quality TiC powder, TiCN powder or ultrafine nanophase TiC + Ni (Co, Al) and TiCN + Ni (Co, Al) composite powders by means of metallothermic reduction. The method comprises the steps of preparing a starting solution of titanium tetrachloride ( $\text{TiCl}_4$ ) in a carbon chloride, feeding the starting solution into a closed container containing molten magnesium (Mg) under inert atmosphere, vacuum-separating unreacted liquid-phase Mg and magnesium chloride ( $\text{MgCl}_2$ ) remaining after reduction of magnesium from the closed container, and collecting a TiC compound from the closed container.

TiC powder, TiCN powder or ultrafine nanophase TiC + Ni (Co, Al) and TiCN + Ni (Co, Al) composite powders having a particle size of a few tens nm can be manufactured in a simpler manner using economically advantageous starting materials such as titanium tetrachloride and carbon chlorides.